

California Secretary of State

INITIAL STATEMENT OF REASONS

Hearing Date/Location: December 13, 2013
2:00 p.m.
1500 11th Street, Auditorium
Sacramento, California 95814

Written Public Comment Period: October 25, 2013, through December 20, 2013.

Subject Matter of Proposed Regulations: Voting System Certification.

Section(s) Affected: Sections 20700 through 20707 of Title 2 of the California Code of Regulations.

Specific Purpose of each adoption, amendment, or repeal:

The purpose of adding the Voting System Certification regulations is to:

1. Establish the specifications for voting machines, voting devices, vote tabulating devices, and any software used for each, including the programs and procedures for vote tabulating and testing. The proposed regulations would implement, interpret and make specific Section 19205 of the California Elections Code.
2. Clarify requirements imposed by recently chaptered Senate Bill 360, Chapter 602, Statutes 2013, which amended California Elections Code Division 19 regarding the certification of voting systems.
3. Clarify the newly defined voting system certification process, as prescribed in Senate Bill 360.

By adding the Voting System Certification regulations, an applicant seeking voting system certification will have a more defined and clear path to receiving such certification of the applicant's voting system for use in California. Further, these Performance Standards ensure the accuracy, security and reliability of the voting systems in California.

Factual Basis/Rationale

Senate Bill 360, Chapter 602, Statutes 2013, amended California Elections Code Division 19 regarding the certification of voting systems.

Prior to Senate Bill 360, the Elections Code required that every direct recording electronic voting system receive federal qualification before the Secretary of State could approve the system. Senate Bill 360 removes the requirement to receive federal qualification and vests control over the certification process with the Secretary of State. Until voting system standards and regulations have been adopted by the Secretary of State, Senate Bill 360 states that the federal Voluntary Voting System Guidelines Draft Version 1.1, as submitted to the United States Election Assistance Commission on August 31, 2012, shall be used as state standards to the extent that they do not conflict with the California Elections Code.

Accordingly, the Secretary of State proposes to add Chapter 6.1, sections 20700 through 20707 of Division 7 of Title 2 to the California Code of Regulations. These sections set forth the procedures for submitting a voting system for certification and the standards the voting system being submitted must meet in order to receive Secretary of State certification.

Section 20700 – This section establishes that the Voting System Performance Standards (October 2013) are to be met in order for a voting system to be certified for use in California. Subsection (a) identifies the Voting System Performance Standards (Performance Standards) and incorporates them by reference. The Performance Standards are a large document. Publishing the Performance Standards in the California Code of Regulations would be cumbersome and impractical. Subsection (b) identifies where to find or obtain a copy of the Performance Standards.

Section 20701 – This section sets forth the requirements for the application for certification of a voting system. Subsections (a) through (r) are all items necessary to properly define the system, the basic configuration of the system and the owners of the system. Specifically, subsection

- (a) requires basic identifying information of the applicant such as name, address, telephone number, and business address. This is necessary to properly identify the applicant.
- (b) requires identifying information about the software and firmware version numbers, which is necessary to properly identify which voting system is being submitted for testing.
- (c) requires a signed confidentiality agreement providing the Secretary of State, upon demand, source code for all software and firmware and a working model of the voting system. Because the Secretary of State requires a full source code review to verify the functionality, accuracy and security on the voting system, the applicant must provide the Secretary of State with a copy. Source code and associated software and firmware are proprietary. Therefore, before the applicant will provide the Secretary of State with such source code, it requires the Secretary of State to have a mutually agreed upon confidentiality agreement.

- (d) requires the applicant to provide a signed letter establishing that the Secretary of State may receive all reports, testing documentation and trusted build installation disks directly from the appropriate federal Voting System Testing Laboratory (VSTL) who tested the voting system under the federal Election Assistance Commission's (EAC) Voting System Testing and Certification process, if applicable. Because voting system's are proprietary and may contain information subject to trade secret protection, in order to receive reports, testing documentation, etc., permission must be granted by the voting system owner/applicant. Both the EAC and the VSTL who tested the voting system are held to a confidentiality agreement between themselves and the voting system vendor, which does not allow them to provide the Secretary of State with copies of any documentation or software that is not publicly disclosable. In order for the EAC and VSTL to provide the Secretary of State with such information, it must receive notification from the voting system vendor that it has authorization to release the items. For security reasons and to verify that the Secretary of State has received the correct version of the software, firmware and source code, the Secretary of State requires that the applicant submit a "trusted" copy to be submitted directly from the VSTL or the EAC, which houses such software, firmware, and source code in escrow, if applicable.
- (e) requires submission of all final VSTL test reports, if applicable, for the voting system in order to review the sufficiency of the testing previously performed.
- (f) requires the applicant to submit documentation showing if the voting system is federally qualified, if applicable, which is necessary to assess whether the Secretary of State may rely upon any federal testing results, in lieu of performing duplicative testing.
- (g) requires a list of all commercial off the shelf (COTS) software, firmware and hardware that is either recommended or required to install, operate, and/or provide maintenance support for the system. It is necessary for the applicant to submit this in order to confirm the COTS status of components identified as such by the applicant and the appropriate level of review of the COTS components in the certification process.
- (h) requires all system configurations, option settings and definition parameters for all software, firmware and hardware (including COTS) in order to ensure that the voting system will be tested, certified and deployed in a known and verifiable configuration.
- (i) requires a directory listing of program, data, and support files required to install, configure, operate, and/or provide supplemental support for the voting system which is necessary to properly install and test the voting system.
- (j) requires a description of known defects, faults or failures as defined in Elections Code section 19212.5, outstanding bugs, security vulnerabilities or other limitations of the system and any mitigations for each in order to confirm compliance with the statutory disclosure requirement and determine whether and how the information disclosed affects the decision whether to certify the system and any conditions to be imposed if the system is certified.

- (k) requires the applicant to provide a detailed network diagram of what components are connected or related and how they are connected, specifically in the configuration being submitted for certification, which is necessary for efficient and correct set-up and testing of the system.
- (l) requires the applicant to provide Use Procedures for the voting system. Use Procedures are necessary to inform the testers on the proper procedures to be used with the voting system. These Use Procedures are reviewed and certified as part of the voting system testing and certification and must be followed by elections officials using the system.
- (m) requires that photographs of the voting system be provided in order to properly identify the voting system.
- (n) requires a list of jurisdictional users who use the exact version of the voting system being submitted. This list of jurisdiction users is useful in determining whether issues affecting the California certification decision have been encountered in the field in locations outside of California where this exact system is certified.
- (o) requires the applicant to submit a list of California jurisdictional users who are using a predecessor version of the voting system being submitted. Identification of these users is necessary to determine whether issues encountered in use of the predecessor version have been addressed in the version submitted for certification.
- (p) requires the applicant to identify all financial relationships between the applicant and the manufacturer, distributor, or retailer of the various components comprising the voting system. This is required to determine whether any COTS designations given to such components require additional scrutiny and to provide information to potential jurisdictional purchasers of the voting system that could affect their assessment of component replacement or upgrade pricing offered by the applicant.
- (q) requires all the documentation necessary for the identification of the full system configuration submitted for evaluation and for the development of an appropriate test plan for conducting system certification testing, collectively referred to as the Technical Data Package (TDP) and as set forth in the "Voting System Performance Standards (October 2013)." The TDP provides information that defines the voting system design, method of operation, and related resources. It provides a system overview and documents the system's functionality, hardware, software, security, test and verification specifications, operations procedures, maintenance procedures, and personnel deployment and training requirements. This information is necessary for efficient certification testing and assessment of whether documentation on which jurisdictional users will rely is accurate and complete.
- (r) allows for the Secretary of State to request additional information on an as needed basis from the applicant. Because each voting system is unique, at times the Secretary of State may need additional information that is not defined in (a) through (q).

Section 20702 – This section establishes the process that will be followed once an application is submitted. Subsection (a) provides that the Secretary of State will review the application, notify the applicant of any deficiencies, and provide the applicant with the amount to be deposited by the applicant into an Agency Trust Account of the Secretary of State's office to cover the estimated cost of the testing and certification process. Elections Code section 19222 requires that the applicant be responsible for all costs associated with the testing of a voting system. Therefore, the Secretary of State has set up an Agency Trust Account for each applicant to deposit monies sufficient to cover the cost of the testing and certification. The Secretary of State cannot determine the cost of such testing until it has received a copy of the application and technical documentation, as the scope of testing will vary by voting system. Minor changes in voting systems have cost as little as a few thousand dollars, but testing of a completely new voting system can cost in the millions. Therefore, the cost is unknown until the Secretary of State has reviewed the application. Subsection (b) provides that if the deposit is not sufficient, the Secretary of State will provide an updated estimate, establishing the additional amount to be submitted by the applicant. Testing time and costs estimates provided at the beginning of the process assume that all portions of the review and testing will be conducted smoothly and without issue. However, at times issues may arise in the testing process that require more time than expected, thus increasing the cost. Subsection (c) gives the applicant, at the end of the process, the option of a refund of any unused portion, or of applying the remaining balance to future testing. Because of the likelihood that the same voting system applicant will submit a future change or other item for testing, the Secretary of State wants to provide either option at the discretion of the applicant.

Section 20703 – This section establishes that the application must be complete, including deposit of sufficient funds to cover the testing before any testing will begin. It is necessary to require that the application be complete and the funds deposited in order to ensure that testing can begin effectively. If all the items required in the application were not submitted, it would be difficult to identify all parts of the system fully and formulate an effective test plan. In addition, the California Elections Code requires the voting system vendor to pay for the costs associated with testing. The Secretary of State does not have the budget to absorb or "front" the costs associated with the testing.

Section 20704 – This section establishes the equipment that must be submitted in order to test a system. The equipment identified is necessary to the functioning of the voting system. Without the equipment, proper testing could not occur.

Section 20705 – This section establishes that the Secretary of State conducts the testing and shall use expert technicians in doing so. This section is nonsubstantive in that it restates the California Elections Code. It is included in order to fully describe the process of testing.

Section 20706 - This section establishes that the Secretary of State will conduct a public hearing and publish a report on the results of the testing. This section is nonsubstantive in that it restates the California Elections Code. It is included in order to fully describe the process of testing.

Section 20707 - This section establishes the application process for review and certification of any modification made to a certified voting system. Because a specific version of a voting system is certified for use, any change to that system's hardware, software or firmware must be reviewed, tested and certified prior to being used or sold in California. Subsection (a) of this section requires that the request be made in writing to the Secretary of State. In order to properly receive, track, and test, the request must be in writing. Subsection (b) identifies what must be provided by the applicant. All items are necessary to properly identify, review, and test the change or modification. Subsection (c) establishes that the Voting System Performance Standards (October 2013) are to be met in order for a modification to a certified voting system to be certified for use in California. This section identifies the Voting System Performance Standards (Performance Standards) and incorporates them by reference. The Performance Standards are a large document. Publishing the Performance Standards in the California Code of Regulations would be cumbersome and impractical. Subsection (d) is nonsubstantive in that it restates the California Elections Code requirement for costs of testing to be paid by the applicant. It is included in order to fully describe the process of testing.

Voting Systems Performance Standards (October 2013) – The Voting System Performance Standards, which are incorporated by reference, contain the standards voting systems must meet to receive certification in California. Further, the document describes the criteria that the standards will be tested against. The Voting System Performance Standards are based on the Voluntary Voting System Guidelines version 1.1, with the addition of the Open-Ended Vulnerability testing from the Voluntary Voting System Guidelines version 2.0 and the substitution of the Accessibility standards from Voluntary Voting System Guidelines version 2.0. The Secretary of State chose to use the Voluntary Voting System Guidelines version 1.1 as the testing basis because Senate Bill 360 established the Voluntary Voting System Guidelines version 1.1 as the state standards until regulations are adopted. Senate Bill 360 also states that the standards published must meet or exceed federal voluntary standards. Therefore, the Secretary of State determined that it would use the most up-to-date and most stringent version of Accessibility standards currently in existence: the Voluntary Voting System Guidelines version 2.0, Accessibility Standards. Further, after conducting the Top-to-Bottom Review of Voting Systems and based upon subsequent state testing, the Secretary of State determined that it was necessary to incorporate open-ended vulnerability testing as a part of the certification process to properly test the security of the voting systems. Because of this, the open-ended vulnerability testing requirements from the Voluntary Voting System Guidelines version 2.0 were added, as it is the only version of federal guidelines that incorporates such testing. Last, the proposed Voting

System Performance Standards were modified to meet specific California law prescribed by the California Elections Code.

Underlying Data and Documents Relied Upon

The Secretary of State relied upon the federal Voluntary Voting System Guidelines Draft Version 1.1, as submitted to the United States Election Assistance Commission on August 31, 2012, and the Voluntary Voting System Guidelines Draft Version 2.0, as submitted to the United States Election Assistance Commission on August 31, 2007, in creating the Voting System Performance Standards.

The Secretary of State also relied upon the Economic Impact Analysis/Assessment (EIA) prepared pursuant to Government Code section 11346.3(b).

Business Impact

The Secretary of State is unaware of an adverse economic impact on businesses.

Specific Technologies or Equipment

These regulations do not mandate the use of specific technologies or equipment.

Consideration of Alternatives

No reasonable alternative to the regulation would be either more effective in carrying out the purpose for which the action is proposed or would be as effective and less burdensome to affected private persons and equally effective in achieving the purposes of the regulation in a manner that ensures full compliance with the law being implemented or made specific.